Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (CURRENTLY AMENDED) In a broadband network having a hybrid fiber coax (HFC) network having network elements operable for communicating telephony, data, and video signals with customer-premises equipment (CPE) of subscriber households, the network elements including a host digital terminal (HDT) for communicating the telephony signals, a cable modem termination system (CMTS) for communicating the data signals, and video equipment for communicating the video signals, a fiber optics network connecting the HDT, CMTS, and video equipment to a fiber optics node, and a coax cable network connecting the fiber optics node to the CPE of the subscriber households, an HFC network management system comprising:

a service, design, and inventory (SDI) system having a database operable for storing data indicative of an inventory of the network elements and the CPE in the HFC network and an inventory of CPE which are out of the HFC network, for storing data indicative of configuration and connectivity of the network elements and the CPE in the HFC network, and for storing data indicative of assigned capacity of the HFC network based on the configuration and the connectivity of the network elements and the CPE in the HFC network; and

an online provisioning application link (OPAL) operable with the database of the SDI system for provisioning a CPE in the inventory of CPE which are out of the HFC network to be added into the HFC network and for provisioning network elements in the HFC network with the CPE added into the HFC network based on the assigned capacity of the network elements.

2. (PREVIOUSLY PRESENTED) The HFC network management system of claim 1 wherein:

the data indicative of configuration and connectivity of the network elements includes data indicative of physical and logical connections between the network elements.

3. (PREVIOUSLY PRESENTED) The HFC network management system of claim 1 wherein:

the data indicative of configuration and connectivity of the network elements includes data indicative of physical and logical connections between the HFC network and the CPE.

4. (ORIGINAL) The HFC network management system of claim 1 wherein:

the SDI system is operable to generate an SDI system report for at least one of a network element and a CPE, the SDI system report including information about the at least one network element and the CPE.

5. (PREVIOUSLY PRESENTED) The HFC network management system of claim 1 wherein:

the data indicative of an inventory of the network elements and the CPE in the HFC network includes data indicative of subscriber households passed in the HFC network.

6. (ORIGINAL) The HFC network management system of claim 5 wherein:

the data indicative of subscriber households passed in the HFC network includes for each subscriber household data indicative of the fiber node connected to the CPE of the subscriber household and the coax bus connecting the subscriber household to the fiber node.

7. (ORIGINAL) The HFC network management system of claim 6 wherein:

the data indicative of subscriber households passed in the HFC network further includes for each subscriber household data indicative of household key, household address, and household location.

8. (PREVIOUSLY PRESENTED) The HFC network management system of claim 1 wherein:

the data indicative of an inventory of the network elements and the CPE in the HFC network includes data indicative of physical location and identification of the network elements.

9. (PREVIOUSLY PRESENTED) The HFC network management system of claim 1 wherein:

the data indicative of an inventory of the network elements and the CPE in the HFC network and an inventory of the CPE which are out of the HFC network includes data indicative of profiles of the network elements and the CPE.

10. (PREVIOUSLY PRESENTED) The HFC network management system of claim 1 further comprising:

an HFC network manager operable for controlling the configuration and connectivity of the network elements and the CPE in the HFC network, wherein the database of the SDI system updates the stored data indicative of the configuration and the connectivity of the network elements and the CPE in the HFC network in response to the HFC network manager changing the configuration and the connectivity of the network elements and the CPE in the HFC network.

11. (PREVIOUSLY PRESENTED) The HFC network management system of claim 1 further comprising:

a fault manager having an alarm visualization tool operable with the database of the SDI system for generating visual displays of the configuration and the connectivity of the network elements and the CPE in the HFC network.

12-16. (CANCELLED)

17. (PREVIOUSLY PRESENTED) A hybrid fiber coax (HFC) network management method for use in a broadband network having a HFC network provided with network elements operable for communicating telephony, data, and video signals with customer-premises equipment (CPE) of subscriber households, the network elements including a host digital terminal (HDT) for communicating the telephony signals, a cable modem termination system (CMTS) for communicating the data signals, and video equipment for communicating the video signals, a fiber optics network connecting the HDT, CMTS, and video equipment to a fiber optics node, and a coax cable network connecting the fiber optics node to the CPE of the subscriber households, the HFC network management method comprising:

storing, in a database, data indicative of an inventory of the network elements and the CPE in the HFC network and an inventory of CPE which are out of the HFC network;

storing, in the database, data indicative of configuration and connectivity of the network elements and the CPE in the HFC network;

storing, in the database, data indicative of assigned capacity of the HFC network based on the configuration and the connectivity of the network elements and the CPE in the HFC network; and

accessing, by an online provisional application link (OPAL), the data stored in the database in order for the OPAL to provision a CPE in the inventory of CPE which are out of the HFC network to be added into the HFC network and to provision network elements in the HFC network with the CPE added into the HFC network based on the assigned capacity of the network elements.

18. (PREVIOUSLY PRESENTED) The HFC network management method of claim 17 wherein:

storing, in the database, data indicative of configuration and connectivity of the network elements includes storing data indicative of physical and logical connections between the network elements.

19. (PREVIOUSLY PRESENTED) The HFC network management method of claim 17 wherein:

storing, in the database, data indicative of configuration and connectivity of the network elements includes storing data indicative of physical and logical connections between the HFC network and the CPE.

20. (ORIGINAL) The HFC network management method of claim 17 further comprising:

generating an SDI system report for at least one of a network element and a CPE, the SDI system report including information about the at least one network element and the CPE.

21. (PREVIOUSLY PRESENTED) The HFC network management method of claim 17 wherein:

storing, in the database, data indicative of an inventory of the network elements and the CPE in the HFC network includes storing data indicative of subscriber households passed in the HFC network.

22. (PREVIOUSLY PRESENTED) The HFC network management method of claim 21 wherein:

storing, in the database, data indicative of subscriber households passed in the HFC network includes storing for each subscriber household data indicative of the fiber node connected to the CPE of the subscriber household and the coax bus connecting the subscriber household to the fiber node.

23. (PREVIOUSLY PRESENTED) The HFC network management method of claim 17 wherein:

storing, in the database, data indicative of an inventory of the network elements and the CPE includes storing data indicative of physical location and identification of the network elements.

24. (PREVIOUSLY PRESENTED) The HFC network management method of claim 17 wherein:

storing, in the database, data indicative of an inventory of the network elements and the CPE in the HFC network and an inventory of the CPE which are out of the HFC network includes storing data indicative of profiles of the network elements and the CPE.

25. (ORIGINAL) The HFC network management method of claim 17 further comprising:

generating visual displays of the configuration of the network elements and the CPE in the HFC network.

26. (CANCELLED)

27. (PREVIOUSLY PRESENTED) The HFC network management method of claim 17 further comprising:

controlling the configuration and connectivity of the network elements and the CPE in the HFC network; and

updating the stored data indicative of the configuration of the network elements and the CPE in the HFC network in response to the HFC network manager changing the configuration and the connectivity of the network elements and the CPE in the HFC network.